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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/580,168

05/19/2006

Florian Lindner

HM-696PCT

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40570

7590

01/27/2009

FRIEDRICH KUEFFNER

317 MADISON AVENUE, SUITE 910

NEW YORK, NY 10017

EXAMINER

JENNINGS, STEPHANIE M

ART UNIT

PAPER NUMBER

4135

MAIL DATE

DELIVERY MODE

01/27/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/580,168	Applicant(s) LINDNER ET AL.	
	Examiner STEPHANIE JENNINGS	Art Unit 4135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 December 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 11-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 May 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20060519</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 1-10 in the reply filed on December 3, 2008 is acknowledged.
2. Claims 11-14 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected group, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on December 3, 2008.

Specification

3. The disclosure is objected to because of the following informalities: wrong patent number referenced. Application references US 3,624,958, which is a patent for a "Novelty Aerial Top".

Appropriate correction is required.

Drawings

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: ES, P1, P2, P3, G1, G2, G3. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either

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“Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Regarding claim 7, the phrase "or the like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "or the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

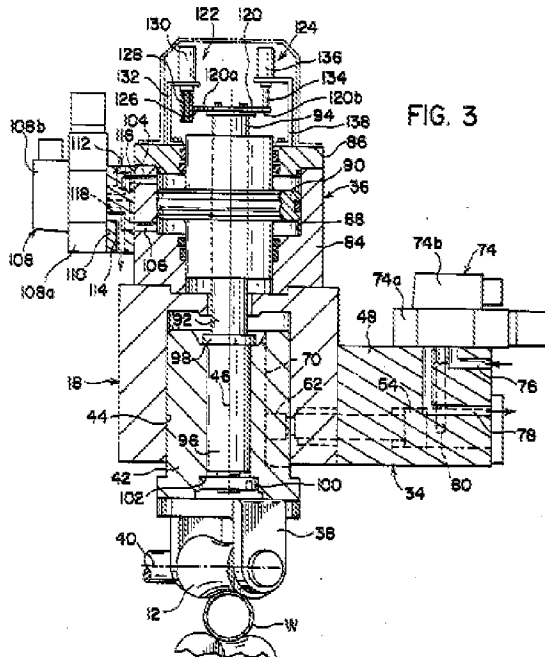
8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gerber US Patent No. 4,471,639 and Herbst US Patent No. 3,566,638.

11. Gerber teaches:



12. Limitations from claim 1, adjusting cylinder for long, rapid lifting movements in rolling stands, including vertical edging stands, wherein each cylinder has at least one piston (54, 56),

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wherein each adjusting cylinder has a piston (54, 56) that is equipped with two oppositely directed piston rods (50, 52) which acts by means of the bearing chocks of at least one work roll or of an interposed roll to adjust a work roll on both sides and each piston is inserted in a recess in the cylinder base (42), such that said base and cover have coaxially arranged bores (44) through which the piston rods (50, 52) pass, wherein the surface (70) formed by the piston (54) and the piston rod (50) is smaller than the surface (72) formed by the piston (56) and the piston rod (52) (column 6, lines 12-40).

13. The examiner notes that the applicant has drafted claim 1 with the use of “or.” The examiner is tasked with reading the claims broadly and by reading the disjunctive connectors, only one of the alternatives in the claim need to be met in order to reject the claim limitation.

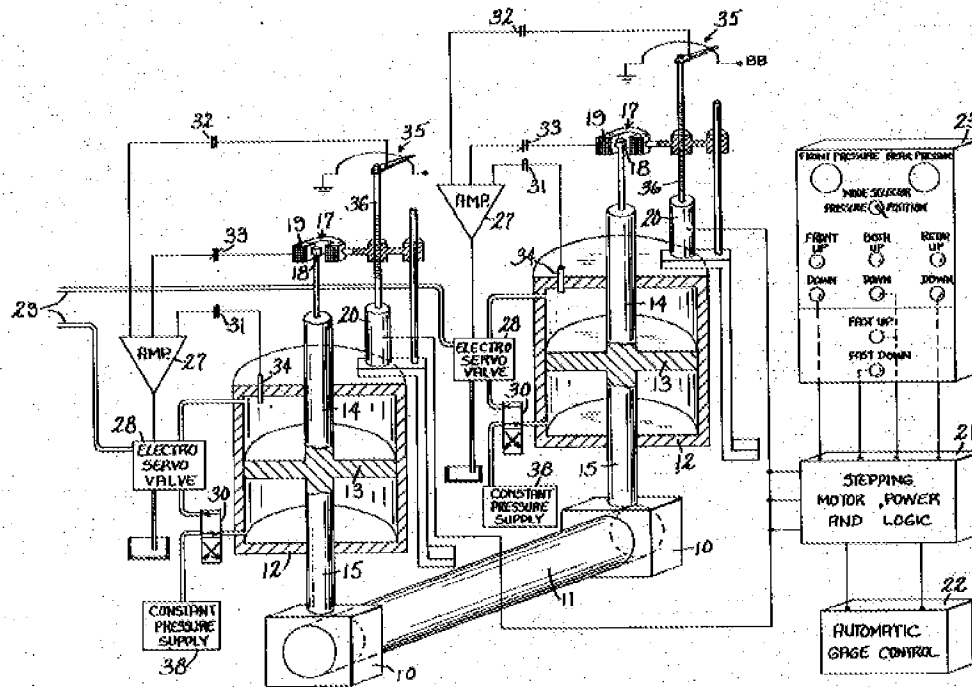
Disjunctive connectors will be treated the same way in following claims.

14. Examiner must give claims their broadest reasonable interpretation, MPEP §2111, “During patent examination, the pending claims must be ‘given the broadest reasonable interpretation consistent with the specification.’ Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified, *In re Pratter*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969), *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997).” Also see *In re Zletz*, 13 USPQ 2d. 1320 (Fed. Cir. 1989).

15. Gerber discloses the claimed invention except for a positioning system. Herbst, however, teaches this feature.

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16. Wherein Herbst further teaches:



17. Limitations from claim 1, which acts by means of the bearing chocks (10) of at least one work roll (11) (column 2, lines 1-10).

18. Limitations from claim 2, adjusting cylinder in accordance with claim 1, wherein the bores contain holding fixtures for piston rod guide elements, which preferably are realized as realized as guide rings (98), and are held by covers (88) (column 7, line 65- column 8, line 2).

19. Limitations from claim 4, adjusting cylinder in accordance with claim 1, wherein the cylinder base (42) and cylinder cover (88) are joined with screws (column 7, lines 49-54).

20. Limitations from claim 5, adjusting cylinder in accordance with claim 1, wherein the complete adjusting cylinder is joined with the upright of the rolling stand (18) with screws (column 7, lines 49-54).

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21. Gerber discloses the claimed invention except for joining the cylinder base and cover with screws and instead discloses a connection method via bolts or "otherwise suitably interconnected" method (column 7, lines 51-52).

22. Limitations from claim 6, adjusting cylinder in accordance with claim 1, wherein a casing (48) is present as an extension of the cylinder base (42), which casing (48) either protects the piston rod (50, 52) (column 6, lines 19-28).

23. Limitations from claim 7, adjusting cylinder in accordance with claim 1, wherein a position measuring system or the like, which is realized as a position sensor (17, 31, 32, 33) and detects the position of the piston (15) (column 3, lines 47-52).

24. Limitations from claim 8, adjusting cylinder in accordance with claim 1, wherein a thrust member (38) is present as an extension of the piston rod (14, 15) for acting on the roll chocks (10) (column 2, lines 1-10).

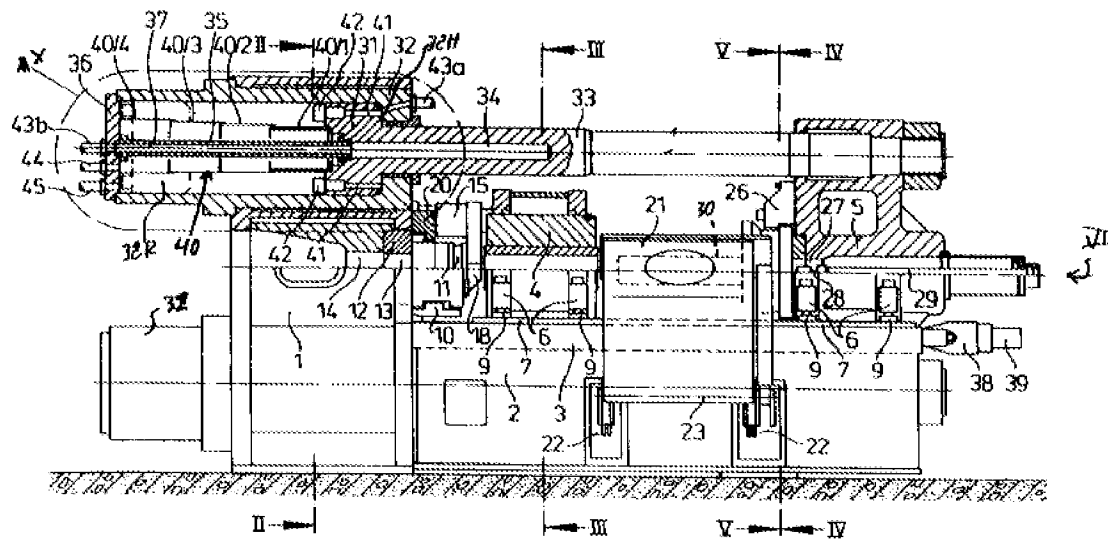
25. It would have been obvious to one of ordinary skill in the art at the time of invention to combine Gerber's and Herbst's inventions because position sensing allows for roller adjustment.

26. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gerber and Herbst as applied to claim 1 above, and further in view of Muschalik et al. US Patent No. 6,082,162.

27. Gerber and Herbst teach an adjusting cylinder for use in a rolling stand, but do not teach such cylinders with seals in the cover. Muschalik, however, does teach this feature.

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Muschalik teaches:

Fig 1

28. Limitations from claim 3, adjusting cylinder in accordance with claim 1, wherein seals that belong to the cylinder (32) are located in the cover (32R, H) and in the piston (31) (column 2, lines 38-45, column 4, lines 8-17 and 29-46).

29. It would have been obvious to one of ordinary skill in the art to combine Muschalik's invention with Herbst's and Gerber's invention because sealing the cylinders prevents the leakage of hydraulic fluid during operation.

30. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gerber and Herbst as applied to claim 1 above, and further in view of Meise, German Patent No. DE2701011 A.

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31. Gerber and Herbst teach a rolling mill with adjusting hydraulic cylinder, but do not teach such a mill with an antitorsion device. Meise, however, teaches this feature.

32. Meise teaches:

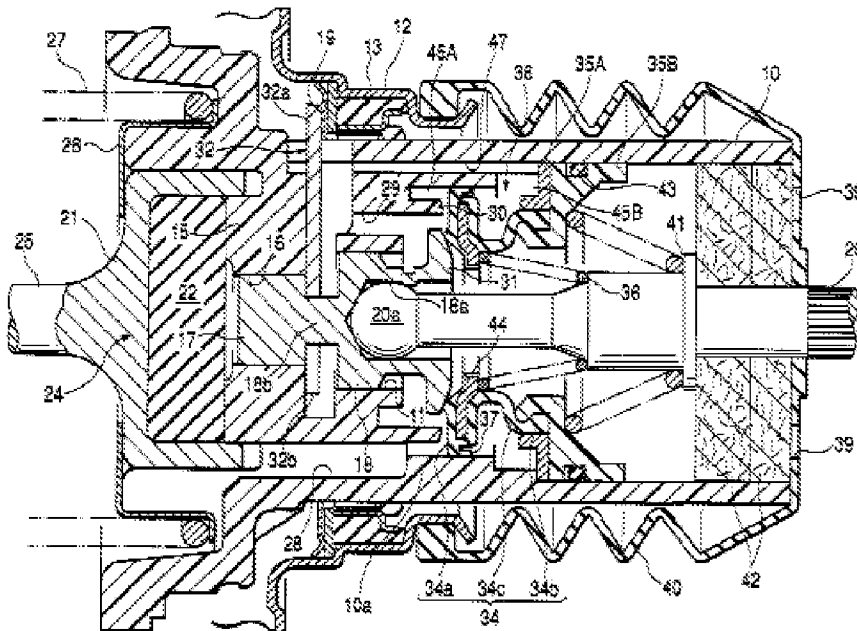
33. Limitations from claim 9, adjusting cylinder in accordance with claim 1, wherein the piston (translated abstract, paragraph 2, line 2) has an antitorsion device (translated abstract, paragraph 1, line 1)

34. It would have been obvious to one of ordinary skill in the art at the time of invention to combine Meise's invention with Gerber's and Herbst's inventions because an antitorsion device would prevent torsion and minimize damage to the apparatus or workpiece resulting from torsional stress.

35. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gerber and Herbst as applied to claim 1 above, and further in view of Shinohara US Patent Application Publication 2002/0073834 A1.

36. Gerber and Herbst teach a rolling mill with adjusting hydraulic cylinder, but do not teach such a mill with a thrust member enclosed by convoluted bellows. Shinohara, however, teaches this feature.

37. Shinohara teaches:



38. Limitations from claim 10, adjusting cylinder (10) in accordance with claim 1, wherein the piston rod (20) joined with the thrust member (2) is enclosed by a convoluted bellows (40) (paragraphs 49 and 56).

39. It would have been obvious to one of ordinary skill in the art to combine Shinohara's and Gerber's and Herbst's inventions because a collapsible and expandable boot allows for modular protection of the piston and adjusting cylinder during operation.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to STEPHANIE JENNINGS whose telephone number is (571)270-7392. The examiner can normally be reached on M-F, 7:30 am-5 pm, EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William M. Brewster can be reached on (571)272-1854. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. J./

Examiner, Art Unit 4135
January 15, 2009

/William M. Brewster/

Supervisory Patent Examiner, Art Unit 4135